REMARKS

Only claim 17 has been amended above. In view of the action taken and the following remarks, further consideration of this application is now requested.

Claim 17 was objected to due to the presences of a spelling error. This error has been corrected in amended claim 17 above so that this objection should now be withdrawn and such action is requested.

Claims 17-26 and 29-30 stand rejected under 35 U.S.C. § 112 as being indefinite. This rejection is considered to have been inappropriate and is particularly so in view of the amendment made to claim 17 to make it clear that the term "essentially permeable" does not mean "completely" impermeable as it was apparently misinterpreted to mean by the Examiner. Additionally, the following explanations are provided in view of the confusion expressed by the Examiner in the sentence spanning pages 2 & 3 of his September, 2004, Action.

That is, it appears that the Examiner does not understand how light for transmitted light illumination can be reflected into the objective lens (which is necessary in view of the fact that only a single light source is present) if the beam splitter is essentially permeable with respect to the light for transmitted light transmitted light illumination. However, claim 17 did not, and now clearly does not, require that the beam splitter is completely permeable for the light for transmitted light illumination, but claim 17 rather defines that the beam splitter is essentially, but not completely, permeable for the light for transmitted light illumination, which means that at least a small portion of the light for transmitted light illumination is reflected by the beam splitter. In view of the fact that usually the light for transmitted light illumination is available at high intensity, in practice, it is fully sufficient if only a small portion of this light, e.g., 1% or even less, is reflected by the beam splitter for passing this light into the objective lens. This fact is also explained in paragraph [0013] of the present application.

Therefore, withdrawal of the rejection under § 112 is in order and is now requested.

Claim 17 has been rejected under 35 U.S.C. § 112 as being anticipated by the disclosure of the International Publication of the Modlin et al. PCT application which is the parent of U.S. Patent No. 6,466,316; for convenience, the citations below will be to column and line from U.S. Patent No. 6,466,316. However, in general, it appears that the Examiner's

conclusions regarding the applicability of the Modlin et al. reference to the present invention are based on an erroneous understanding of its disclosure by the Examiner.

Modlin et al. apparently relates to a spectroscopic measurement system having a light source 100 for emitting light having variable wavelengths. In addition, the system comprises focusing lenses 117a-c for creating confocal optics (see column 9, lines 51-54). In addition, a beam splitter 118 is provided which, however, is changeable depending on the measuring mode actually used. In the case of luminescence measurement, a dichroic beam splitter is used which reflects the excitation light and which transmits the fluorescence emission light, while in other cases, for example, a 50:50 beam splitter is used (see column 10, first paragraph).

By contrast, the present invention uses the same beam splitter for all measuring modes, i.e., the same beam splitter is used both for epi-fluorescence measurements and for transmitted light illumination. Consequently, with the present invention, it is not necessary to change the beam splitter when changing, for example, from fluorescence measurements to trans-illumination measurements.

In item 4, which begins at line 54 of column 17 of Modlin et al., an arrangement for absorption measurement is described, wherein illumination light which already has once passed through the sample is caused to pass a second time through the sample by a reflective surface arranged behind the sample. The incident light is reflected onto the sample by a beam splitter. However, in this measurement mode, which is illustrated in Fig. 11, no objective lens appears to be involved for focusing the incident light onto the sample since no focusing lens is shown and the reflective surface is flat. For the embodiment of Fig. 11 to focus light the reflective surface inherently would have to be curved since, otherwise, the divergent beams having passed through the sample would not be reflected back into the sample. In other words, the measurement mode shown in Fig. 11 apparently uses parallel light beams while the present invention uses focused light in the transmitted light illumination mode for obtaining an image of the sample. By contrast, with the absorption assaying arrangement shown in Fig. 11 would be unable to create an image of the sample.

In this respect it is also noted that, as indicated at column 18, lines 6-8 in the absorption measurement the focal plane of the confocal optics is adjusted so that the

instrument "focuses on the far side of the sample container," i.e. there is no focus on the sample, which is consistent with the representation of the set up in Fig. 11.

Thus, the system according to claim 17 of the present application differs from the system of Modlin et al. in that the system of Modlin et al. does not use the same beam splitter for epi-fluorescence measurements and for transmitted light illumination measurements; rather, Modlin et al. teaches to exchange the beam splitter, while according to the present invention the same beam splitter is used for both measurement. In addition, in the system of Modlin et al. the reflector means shown in Fig. 11 are not capable of reflecting light which has been focused by the objective lens on the illuminated area and transmitted through the specimen, back, through the illuminated area of the specimen.

As such, Modlin et al. clearly fails to anticipate the subject mater of present claim 17.

Dependent claims 18, 19, 21, 22, 24, 26 , and 30, have been rejected by the Examiner under 35 USC § 103 based upon a combination of Modlin et al. (discussed above) and Doyle U.S. Patent 4,758,088. However, it appears that Doyle relates exclusively to transmitted light measurements and as a result uses a light source having constant wavelength without a dichroic beam splitter, so that the skilled person would not have had any motivation to combine documents Doyle with Modlin et al., since Modlin et al. does not relate to a transmitted light illumination mode, but rather to an epi-fluorescence measurement mode and an absorption measurement mode (wherein, in the absorption mode no light is focused onto the sample so that no image of the sample is created). In addition, neither of these patents teaches to use the same beam splitter both for epi-fluorescence measurements and transmitted light illumination measurements. To the contrary, if the skilled person would combine the teachings of Modlin et al. and Doyle as alleged by the Examiner (which in fact, however, would not be done), the more likely result would be to consider changing the beam splitter depending on whether presently an epi-fluorescence measurement or a transmitted light illumination measurement is carried out. As such, even if the skilled person would combine these two references, the present invention as defined in claim 17 would not result or even be remotely suggested.

The Allingham reference relied upon by the Examiner in further combination with the Modlin et al. and Doyle references (claim 20), as well as the Lanni et al. (claims 23 & 25),

and Pinkel et al. (claim 29) which are combined separately only with Modlin et al. are no more capable of overcoming the deficiencies Modlin et al. than is Doyle.

Therefore, since the present invention is neither anticipated nor rendered obvious by the prior art applied by the Examiner, the outstanding rejections under §§ 102/103 should be with drawn and such action is hereby requested.

While the present application is now believed to be in condition for allowance, should the Examiner find some issue to remain unresolved, or should any new issues arise, which could be eliminated through discussions with Applicant's representative, then the Examiner is invited to contact the undersigned by telephone in order that the further prosecution of this application can thereby be expedited.

Respectfully submitted,

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